ENDF/B-VII.1 status

M. Herman National Nuclear Data Center Brookhaven National Laboratory Nuclear Data Week, Nov. 14-18, 2011



a passion for discovery



VII.1 Marathon - final phase Beta4 released Sep. 9, 2011



- Neutron and new decay library
- Final version for validation (validation paper)
- Major changes
 - Covariances: nearly full set of (186 materials)
 - O-16: Capture replaced with JENDL-4
 - **Zr-90,91,92,93,94,95,96**: total x-sec modulated following VI.8, JENDL-4.0 angular distributions for elastic, and modified thermal capture for 91-Zr
 - Gd-157: reverted thermal capture cross section to VII.0
 - Am-243: Fixed MF1, MT452 for missing energy points, new (n,2n) isomeric ratio (P. Talou); new evaluation for thermal, RRR, and URR as well as the fast capture region (S. Mughabghab)
 - Pu-242: New thermal, RRR and URR and fast capture region.
 - 50 minor actinides: energy dependent fission release data based on R.
 Vogt Energy-Dependent Fission Q Values



The last mile... Beta5 released Oct. 30, 2011



- Major update of decay sublibrary
- Neutron sublibrary (97 commits)
 - correcting covariances
 - correcting format errors
- Cross section changes in neutron sublibrary
 - F-19: reverted to VII.0 evaluation
 - Ag-109: slight modification of bound res. parameters
 - Tm-169,169,170: New BNL/LANL evaluations
 - TI-203,205: New BNL evaluations



Number of nuclides with decay data

3017



Number of neutron evaluations



Number of neutron covariances



Finish!!! ENDF/B-VII.1 Dec. 2x, 2011

- Changes still to be made
 - Modifications to Tm evaluations (recent Mughabghab findings)
 - Fix remaining glitches that are fixable
 - Updating description of covariances
 - Standardization of the top lines (version of the library, release date, ...)
 - Final STANEF run
- Authors of new evaluations:
 PLEASE...review descriptions and delete parts referring to the data removed from the evaluation.



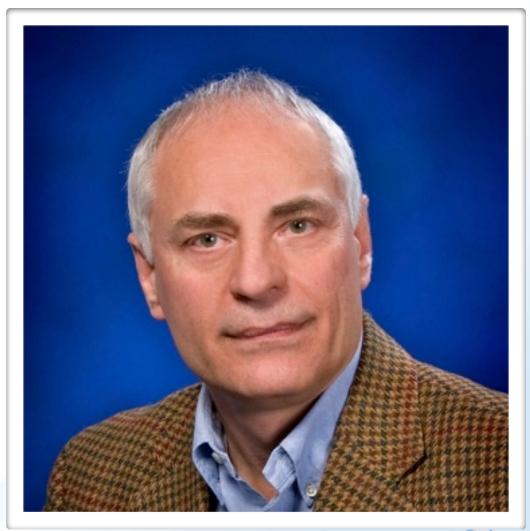


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ENDF library manager



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 Dave Brown took over function of the ENDF library manager on November 10, 2011.

